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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/921,936	08/02/2001	Madhu Rao	81862P248	8366

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EXAMINER

SURVILLO, OLEG

ART UNIT	PAPER NUMBER
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2142

MAIL DATE	DELIVERY MODE
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06/06/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/921,936

Applicant(s)

RAO ET AL.

Examiner

Oleg Survillo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-81 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-81 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 02/25/2005.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 23, 2007 has been entered.

Response to Arguments

2. The declaration of prior invention in the United States filed under 37 CFR 1.131 on February 23, 2007 has been considered but is ineffective to overcome the prior art reference used in the rejection in the Office action mailed on June 10, 2005.

3. The first named inventor of the current application is attempting to show the alleged actual reduction to practice of the invention in this country in order to antedate the reference applied in the last action. Reasons for holding the declaration ineffective to overcome the Cisco Document reference (Cisco Publication: Frame Relay ELMF Address Registration, posted on December 6, 2000) are explained below.

I. FORMALITIES

4. Affidavits or declarations to overcome a rejection of a claim or claims must be made by the inventor or inventors of the subject matter of the rejected claim(s), a party

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qualified under 37 CFR 1.42, 1.43, or 1.47, or the assignee or other party in interest when it is not possible to produce the affidavit or declaration of the inventor(s). Thus, where all of the named inventors of a pending application are not inventors of every claim of the application, any affidavit under 37 CFR 1.131 could be signed by only the inventor(s) of the subject matter of the rejected claims. Further, where it is shown that a joint inventor is deceased, refuses to sign, or is otherwise unavailable, the signatures of the remaining joint inventors are sufficient. However, the affidavit or declaration, even though signed by fewer than all the joint inventors, must show completion of the invention by all of the joint inventors of the subject matter of the claim(s) under rejection.

In re Carlson, 79 F.2d 900, 27 USPQ 400 (CCPA 1935). See **MPEP Section 715.04**.

The declaration filed under 37 CFR 1.131 on February 23, 2007 was only signed by one of the two inventors, Madhu Rao. However, no showing has been made on the record that Mr. Rao was the sole inventor of the subject matter claimed. Therefore, the declaration is ineffective.

II. GENERAL CONSIDERATIONS

A general allegation that the invention was completed prior to the date of the reference is not sufficient. *Ex parte Saunders*, 1883 C.D. 23, 23 O.G. 1224 (*Comm'r Pat.* 1883). Similarly, a declaration by the inventor to the effect that his or her invention was conceived or reduced to practice prior to the reference date, without a statement of facts demonstrating the correctness of this conclusion, is insufficient to satisfy 37 CFR 1.131.

The affidavit or declaration and exhibits must clearly explain which facts or data applicant is relying on to show completion of his or her invention prior to the particular general assertion that the exhibits describe a reduction to practice "amounts essentially to mere pleading, unsupported by proof or a showing of facts" and, thus, does not satisfy the requirements of 37 CFR 1.131(b). *In re Borkowski*, 505 F.2d 713, 184 USPQ 29 (CCPA 1974).

Applicant must give a clear explanation of the exhibits pointing out exactly what facts are established and relied on by applicant. 505 F.2d at 718-19, 184 USPQ at 33. See also *In re Harry*, 333 F.2d 920, 142 USPQ 164 (CCPA 1964). (Affidavit "asserts that facts exist but does not tell what they are or when they occurred."). See **MPEP Section 715.07**.

5. On page 2 of the declaration, the applicant states: "Exhibit 1 attached herewith is a copy of screen images from debug sessions that capture the ELMI-AR protocol data in a running session that illustrates aspects of the invention embodied within the product" (lines 3-5). However, there is no clear explanation of what information presented on the debug session images constitutes illustration of aspects of the invention and which images illustrate these aspects.

III. REDUCTION TO PRACTICE

In general, proof of actual reduction to practice requires a showing that the apparatus actually existed and worked for its intended purpose. However, "there are some devices so simple that a mere construction of them is all that is necessary to

constitute reduction to practice." *In re Asahi/America Inc.*, **>68 F.3d 442, 37 USPQ2d 1204, 1206< (Fed. Cir. 1995) (Citing *Newkirk v. *>Lulejian<*, 825 F.2d 1581, 3USPQ2d 1793 (Fed. Cir. 1987) and *Sachs v. Wadsworth*, 48 F.2d 928, 929, 9 USPQ 252, 253 (CCPA 1931). The claimed restraint coupling held to be so simple a device that mere construction of it was sufficient to constitute reduction to practice. Photographs, coupled with articles and a technical report describing the coupling in detail were sufficient to show reduction to practice.). See **MPEP 715.07 III**.

6. On page 1 of the declaration, the applicant states: "I hereby declare that my invention was reduces to practice prior to December 6, 2000. Below stated are activities of myself and Cisco Technology, Inc. regarding the date on which the invention was reduced to practice." (paragraph [3]). The applicant also states: "My invention is embodied in a Cisco router product that implements the ELMI-AR protocol. Prior to December 6, 2000, I developed and tested a working version of the product comprising my invention. Thus, my invention was reduced to practice prior to December 6, 2000" (paragraph [4]). However, the mere allegations provided in the declaration that the invention was actually reduced to practice are not sufficient without proof to support the allegations of actual reduction to practice. In particular, no evidence has been provided to support an allegation that the product comprising the invention was "a working version" prior to December 6, 2000. Therefore, due to a lack of evidence and sufficient explanation of debug session images of the Exhibit 1 provided in this declaration, actual reduction to practice has not been established for the invention prior to the filing of the non-provisional application 09/921,936 dated August 02, 2001.

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7. Therefore, the declaration is ineffective to establish actual reduction to practice of the CLAIMED invention.

Specification

8. The disclosure is objected to because of the following informalities:

Paragraphs [0021-0022] provide a description of Figures 3 and 4. However, the reference to each block for Fig. 3 and 4 is unclear. For example, Par. [0021] line 4 reads: "appends address information to a message 300." It is unclear whether the reference number (300) is referring to a message or to a block in Fig. 3.

Applicant is suggested to amend recited paragraph in order to clarify the reference to each block (or step) of Fig. 3 and 4 such as, for example, Par. [0021] line 4 would read: "appends address information to a message, in block 300."

Claim Rejections - 35 USC § 101

9. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 33-48 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

As to claims 33-48, a machine-readable storage medium is considered to be non-statutory subject matter because specification states: "the logic to perform the methods could be implemented by machine readable media, such as electrical, optical, acoustical and other forms of propagated signals (e.g. carrier waves, infrared signals,

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digital signals, etc)." (paragraph [0027]). Under 35 U.S.C. 101, signals *per se* are considered to be non-statutory subject matter.

Applicant is advised to amend the specification in order to satisfy the requirements of 35 U.S.C. 101 regarding claims 33-48.

Claim Rejections - 35 USC § 112

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. Claims 3-4, 7-12, 24-25, 27-32, 40-41, 43-48, 56-57, 59-64, 67-68, 71-72, 75-76 and 79-80 recite the limitation "the appended message".

Claim 7 recites the limitation "the router".

Claim 8 recites the limitation "the switch".

There is insufficient antecedent basis for these limitations in the claims.

As to claim 33, it is ambiguous because it is unclear whether the claim is directed to a machine-readable storage medium storing instructions for performing a plurality of operations or a method comprising a plurality of steps. It appears that what is claimed is a machine-readable storage medium comprising method steps, which is ambiguous because a machine-readable storage medium is expected to comprise computer executable instructions for performing the desired steps. If the applicants' intention was to claim a machine-readable storage medium comprising a sequence of instructions,

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then computer executable instructions for performing the recited steps should be claimed rather than method steps as presently claimed.

Claims 34-48 incorporate the limitations of claim 31 and also appear to claim additional method steps (e.g. claim 34 has the machine-readable storage medium further comprising a method step), and therefore are rejected for the same reasons.

Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

13. Claims 1-81 are rejected under 35 U.S.C. 102(a) as being anticipated by Cisco document (Cisco Publication: Frame Relay ELMI Address Registration, posted on Dec. 6, 2000).

As to claim 1, Cisco document shows a system, comprising a local area network management system to manage and configure a network of routers comprising Network Management System (NMS) (page 2, under section Feature Overview and Fig. 1), a wide area network management system to manage and configure a network of switches comprising Network Management System (NMS) (page 2, under section Feature Overview and Fig. 1), and address registration information to be appended to a message sent between a first router of the network of routers and a first switch of the

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network of switches over a connection between the first router and the first switch (page 2, under section Feature Overview and Fig. 1).

As to claim 2, Cisco document shows that the address registration information comprises an interface index (page 2, under Feature Overview, line 4).

As to claim 3, Cisco document shows that the interface index comprises a slot number from which the appended message was sent comprising enabling ELMI on the Cisco router and Cisco switch, which configures the slot number in the interface index (under Prerequisites and Table 1).

As to claim 4, Cisco document shows that the interface index comprises a port number from which the appended message was sent comprising enabling ELMI on the Cisco router and Cisco switch, which configures the port number in the interface index (under Prerequisites and Table 1).

As to claim 5, Cisco document shows that the address registration information comprises an Internet Protocol address (under Feature Overview, line 4).

As to claim 6, Cisco document shows that the address registration information comprises spare bytes wherein spare bytes are the last 6 bytes of the address registration information that follow an IP address information bytes (page 18, sample output following Table 3, and Table 4).

As to claim 7, Cisco document shows that the router sends the appended message (page 2 lines 1-5 and page 8 under Usage Guidelines, "...the first line describes the LMI request that the router has sent to ..." & "... you can use this

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command to determine whether the router and the (Frame Relay switch) are sending and receiving LMI packets properly ...").

As to claim 8, Cisco document shows that the switch sends the appended message (page 2 lines 1-5 and page 8 under Usage Guidelines, "...the second line describes the LMI reply that the router has received from the switch ..." and "... you can use this command to determine whether (the router) and the Frame Relay switch are sending and receiving LMI packets properly ...").

As to claim 9, Cisco document shows that the appended message is an enhanced local management interface message (page 2 under Feature Overview).

As to claim 10, Cisco document shows that the appended message is sent when the network of switches and the network of routers are first configured (page 2, Fig. 1, "... the first switch and router are first configured and under Prerequisites, "ELMI must be enabled on the Cisco router and Cisco switch").

As to claim 11, Cisco document shows that the appended message is sent when the network of switches or the network of routers has a change in configuration (page 2 under Feature Overview, "... When the management IP address of the switch changes, an asynchronous ELMI version status message is sent to the neighboring device immediately...").

As to claim 12, Cisco document shows that the appended message is sent at a regular interval (page 2, under Feature Overview, "... the NMS 'polls' the devices to collect the connectivity information...").

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As to claim 13, Cisco document shows that the local area network management system uses the address registration information to map the network of switches (page 2, under Feature Overview, "With the Frame Relay ELMI Address Registration feature, the NMS can detect switch and router interconnection and create an end-to-end network topology map for network administrators", Table 2, "... yourseen (136) counter maps to the LAST RCVD SEQ counter of the switch...").

As to claim 14, Cisco document shows that the local area network management system configures the network of switches (under Prerequisites, "ELMI must be enabled (configured) on the Cisco switch").

As to claim 15, Cisco document shows that the wide area network management system uses the address registration information to map the network of routers (page 2, under Feature Overview, "With the Frame Relay ELMI Address Registration feature, the NMS can detect switch and router interconnection and create an end-to-end network topology map for network administrators").

As to claim 16, Cisco document shows that the wide area network management system uses the address registration information to map the network of routers (under Configuring the IP address to be Used for ELMI Address Registration Configuration, "... because no other IP address was configured, the router will share an IP address of 0.0.0.0 and a valid ifIndex.>").

As to claim 17, Cisco document shows a method, comprising appending address registration information to a message and sending the message between a router of a

router network and a switch of a switch network (pages 2-3, under Feature Overview, and Fig. 1).

Claims 18-32 have similar limitations as claims 1-16, which are directed to switches and routers in the system that makes the interconnectivity including the LAN and WAN. Therefore, claims 18-32 are anticipated by the Cisco document for the same reasons set forth in the rejection of claims 1-16.

As to claim 33, Cisco document shows a machine-readable storage medium tangibly embodying a sequence of instructions executable by the machine to perform a method comprising appending address registration information to a message, and sending the message between a router of a router network and a switch of a switch network comprising enhancing the Cisco Frame Relay MIB to support the new ELMI information and wherein NMS uses the MIB to extract the IP address and ifIndex of devices neighboring the managed device using embedded instructions (pages 2-3 under Feature Overview, and Fig. 1)

Claims 34-48 have similar limitations as claims 17-32, which are directed to a method of appending address registration information to a message, and sending the message between a router of a router network and a switch of a switch network. Therefore, claims 34-48 are anticipated by the Cisco document for the same reasons set forth in the rejection of claims 1-16.

As to claim 49, Cisco document shows a system comprising a switch for appending address registration information to a message and sending the message

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between a router of a router network and a switch of a switch network (page 3 under Feature Overview).

Claims 50-64 are directed to a system that has similar limitations incorporating WAN, LAN, NMS, CLI, and ELMI as the system of claims 1-16. Therefore, claims 50-64 are anticipated by the Cisco document for the same reasons set forth in the rejection of claims 1-16.

As to claims 65-80, the devices of a router and a switch that send appended message over a connection that connects the routing unit and the switching unit, have similar limitations as claims 1-16. Therefore, claims 65-80 are anticipated by the Cisco document for the same reasons set forth in the rejection of claims 1-16.

As to claim 81, Cisco document shows a method comprising appending address registration information to a message (under Configuration Examples, "Configuring the IP address to be used for ELMI address registration configuration – The following example shows how to configure the IP address to be used for ELMI address registration. Automatic IP address selection is automatically disabled when the IP address is configured. ELMI is enabled on serial interface 0."), sending the message between a router of a router network and a switch of a switch network (under Feature Overview and Fig. 1), using the address registration information to map the router network from a wide area network management system controlling the switch network (under Feature Overview, "With the Frame Relay ELMI Address Registration feature, the NMS can detect switch and router interconnection and create an end-to-end network topology "map" for network administrators"), configuring the router network

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using the wide area network management system (under Benefits, "... using the ELMI protocol and an enhanced MIB, an NMS can now detect connectivity among the switches and routers in a network. This new functionality allows for autodetection of the complete network topology."), using the address registration information to map the switch network from a local area network management system controlling the router network (under Benefits, "... using the ELMI and enhanced MIB, an NMS can now detect connectivity among the switches and the routers in a network. This new functionality allows for autodetection of the complete network topology."), and configuring the switch network using the local area network management system (under Prerequisites, "ELMI must be enabled (configured) on the Cisco switch").

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Oleg Survillo whose telephone number is 571-272-9691. The examiner can normally be reached on M-Th 7:30am - 5:00pm; F 7:30am - 4:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on 571-272-3868. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Examiner: Oleg Survillo

Date: May 23, 2007

Phone: 571-272-9691



ANDREW CALDWELL
SUPERVISORY PATENT EXAMINER